

What's the Fuss about BPA?

The chemical Bisphenol A (BPA) has been used for years. BPA is a chemical used to make a hard, clear plastic known as polycarbonate. Polycarbonate has been used in products like reusable water bottles and baby bottles. BPA is also found in epoxy resins, which act as a protective lining on the inside of metal-based food and beverage cans. BPA used for bottles and can linings requires FDA approval and is treated as an indirect food additive or food contact substance. The chemical was originally approved for use in the 1960s.



Companies use BPA because of its properties. Polycarbonate plastic is very durable. It is used in building and construction, automotive headlamp lenses, CDs and DVDs and other applications. The long product life and reliable performance are important for these products. Polycarbonate is also almost unbreakable which makes it great for helmets, hard hats, protective visors, eyewear lenses, baby bottles and reusable water bottles, among other products. Consumers derive great value from its properties but questions about its use have come from research into the effects of exposure to BPA used in food and water containers.

The Food and Drug Administration and the National Toxicology Program have not made regulatory recommendations on safe levels of exposure to Bisphenol A. BPA has been restricted in Canada and some U.S. states and municipalities because of potential health effects.

In its report on BPA, the National Toxicology Program expressed “some concern for effects on the brain, behavior, and prostate gland in fetuses, infants, and children at current human exposures to bisphenol A.” but only “minimal concern for effects on the mammary gland and an earlier age for puberty for females in fetuses, infants, and children at current human exposures to bisphenol A” and “negligible concern” for other negative health outcomes.

In 2009 Consumer Report released their latest tests of canned foods and noted that almost all of the canned foods tested contain some BPA. In the report, they wondered at the appropriateness of federal guidelines which base an upper daily limit of safe exposure at 50 micrograms of BPA per kilogram of body weight, a level is based on experiments conducted in the 1980s. rather than hundreds of more recent animal and laboratory studies indicating serious health risks could result from much lower doses of BPA.

The BPA issue is very complex. Any change in the regulations would have great impact on food processing industries and developers of food containers. Changing a product composition would be very expensive for a company. Many water bottle and baby bottle companies have,

however, changed their product and packaging to be BPA free because of the possible health risk, consumer concerns and media attention to this issue. However, this change meant finding a new plastic. Their manufacturing process must be changed to match the new plastic. Suppliers and contracts must be found and arranged. These costs can easily put small companies out of business and the workers will lose their jobs.

Questions for Reflection and Discussion:

If you were ran a company whose food products used bottles or cans with BPA in the container or its lining: what would you do?

How sure of health risks should we be before refusing to use BPA in our food containers?

How serious must a health risk be before it becomes a factor in whether BPA is used in food containers?

Should the cost of switching to non-BPA containers be a factor in our decision?

Should parents allow their children to use bottles with BPA or eat food from containers lined with BPA?

References:

Update on Bisphenol A for Use in Food Contact Applications, U.S. Food and Drug Administration, January 2010.

<http://www.fda.gov/downloads/NewsEvents/PublicHealthFocus/UCM197778.pdf>

Consumer Report, December 2009.

<http://www.consumerreports.org/cro/magazine-archive/december-2009/food/bpa/overview/bisphenol-a-ov.htm>